SUPPLEMENTARY FIGURES S1 AND S2

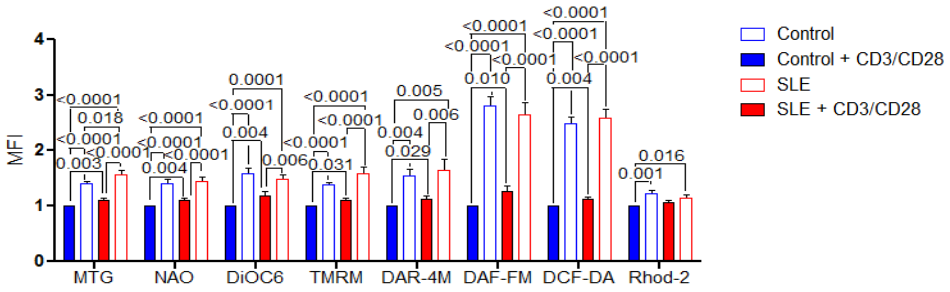
LEGENDS TO SUPPLEMENTARY FIGURES

Figure S1. Flow cytometry of mitochondrial mass (NAO and MTG), $\Delta\psi_m$,($DiOC_6$ and TMRM), $ONOO^-$ (DAR-4M), NO (DAF-FM), H_2O_2 (DCF-DA), mitochondrial Ca^{2+} levels (Rhod-2) in PBL of 48 SLE patients and 32 matched healthy controls after overnight incubation without (panel A) and with CD3/CD28 co-stimulation (panel B). MFI values were compared to those of control PBL normalized at 1.0 for each experiment. Values normalized to mitochondrial mass were determined by MTG (panel C, left panel) and NAO fluorescence (panel C, right panel). Data were analyzed by two-tailed paired t-test; p values < 0.05 are indicated for each comparison.

Figure S2. Mitochondrial mass-normalized O_2 consumption by PBL of SLE patients and matched healthy controls. A, Mitochondrial mass-adjusted ETC activity was measured by O_2 consumption in rested PBL of 48 SLE and 32 matched healthy controls. O_2 consumption in rested PBL was normalized to mitochondrial mass. Mitochondrial mass was assessed by MTG (left panel) and NAO mean fluorescence intensity (MFI) in lupus and matched healthy control PBL in parallel (right panel). For each experiment, mitochondrial mass of lupus PBL was expressed relative to that of control PBL set to 1.0. B, Mitochondrial mass-adjusted ETC activity measurement by O_2 consumption in CD3/CD28-stimulated PBL of 48 SLE and 32 matched healthy controls. ETC activity was assessed relative to mitochondrial mass determined by MTG (left panel) and NAO fluorescence as described for resting cells (right panel). Data were log transformed and compared by paired t-test. P values < 0.05 are indicated for each comparison.

Figure S1

A


MFI
MTG
NAO
DiOC6
TMRM
DAR-4M
DAF-FM
DCF-DA
Rhod-2
Control
Control + CD3/CD28
SLE
SLE + CD3/CD28

B

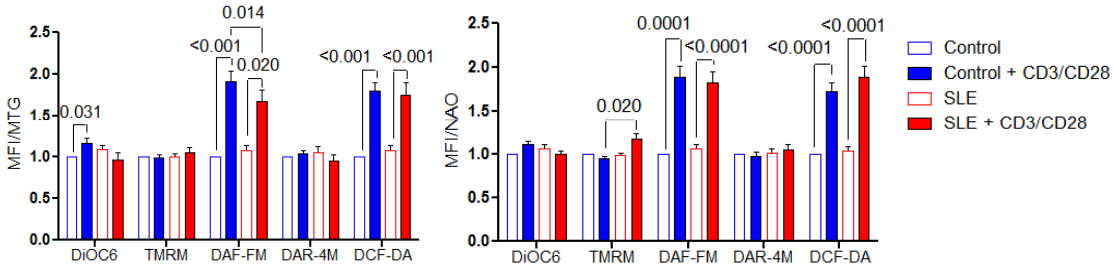
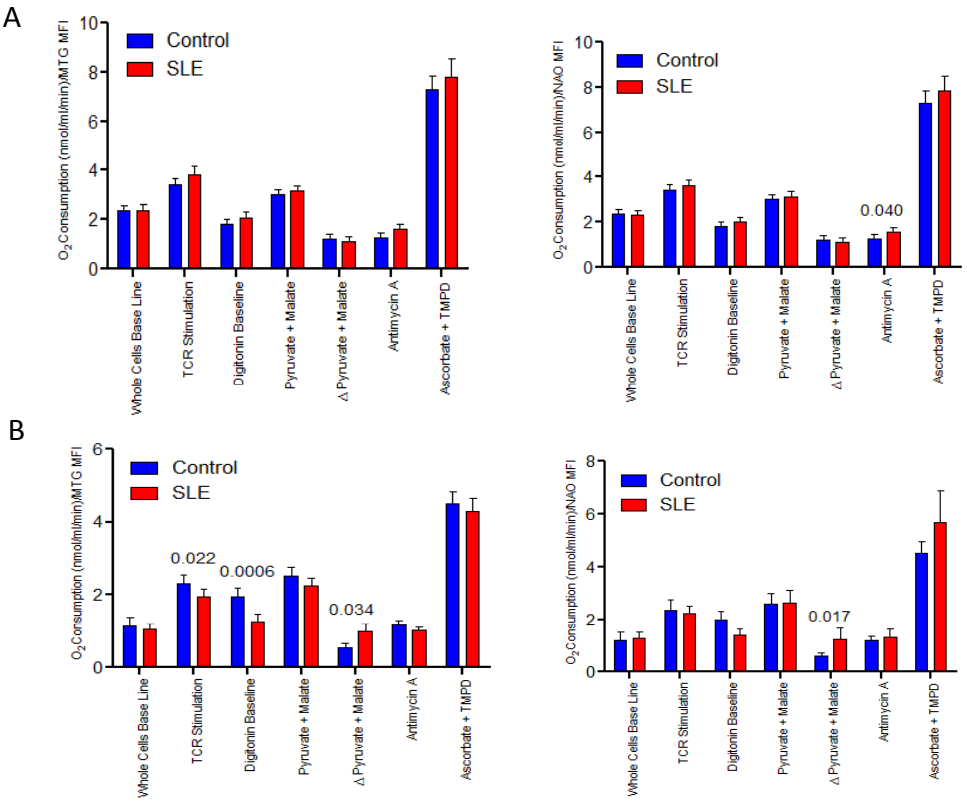

MFI/MTG
MFI/NAO
DiOC6
TMRM
DAF-FM
DAR-4M
DCF-DA
Control
Control + CD3/CD28
SLE
SLE + CD3/CD28

Figure S2


A
Control
SLE
O_2Consumption (nmol/ml/min)MTG MFI
O_2Consumption (nmol/ml/min)NAO MFI
0.040
Whole Cells Base Line
TCR Stimulation
Digitonin Baseline
Pyruvate + Malate
Δ Pyruvate + Malate
Antimycin A
Ascorbate + TMPD
B
Control
SLE
O_2Consumption (nmol/ml/min)MTG MFI
O_2Consumption (nmol/ml/min)NAO MFI
0.022
0.0006
0.034
0.017
Whole Cells Base Line
TCR Stimulation
Digitonin Baseline
Pyruvate + Malate
Δ Pyruvate + Malate
Antimycin A
Ascorbate + TMPD